

# MINIMUS+

---

CAPTURE. PROCESS. DISTRIBUTE

QUICK-START GUIDE

# EU Declaration of Conformity

## We

Guralp Systems Ltd  
Midas House, Calleva Park, Aldermaston  
READING, RG7 8EA.

Tel: +44 118 981 9056  
E-mail: technical@guralp.com

## Declare under our sole responsibility that the following product

Equipment name: Minimus and Minimus+ with GPS  
Model Number: MI-2407SA0V20124 and MI-2414SA0V20643 and appropriate variants

## Is in conformity with the

Radio Equipment Directive 2014/53/EU  
Electromagnetic Compatibility Directive 2014/30/EU  
Low Voltage Directive 2014/35/EU  
Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU

## by applying the following harmonised standards and technical specifications:

EN 55011, EN 55016:2009 +A1:2010 – Conducted Emissions  
EN 55011, EN 55032 :2009 +A1:2010 – Radiated Emissions  
EN 61000-4-2:2009 – Electrostatic Discharge Immunity  
EN 61000-4-3:2006 +A1:2008 +A2:2010 – Radiated RF Immunity  
EN 61000-4-4:2012 – Electrical Fast Transients Immunity  
EN 61000-4-5:2014 – Voltage Surge Immunity  
EN 61000-4-6:2014 – Conducted RF Immunity  
EN 61000-4-8:2010 – Power Frequency Magnetic Field Immunity  
IEC 61010-1 3<sup>rd</sup> Edition - Low voltage Safety  
2011/65/EU - RoHS

Signed for and on behalf of  
Guralp Systems Ltd  
on 12 April 2021

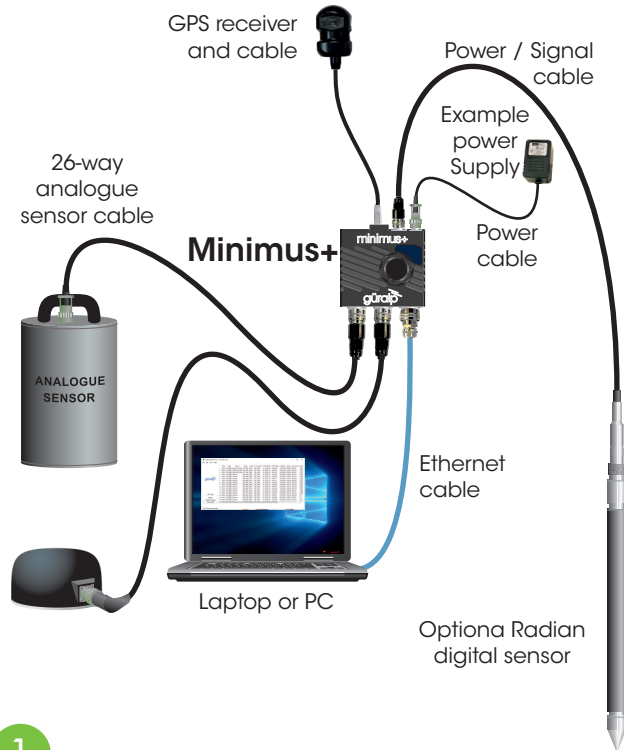
Systems Director



# Minimus+

## QUICK-START GUIDE

### Initial Hardware Setup



Power cable (with bare ends), GPS receiver, GPS cable, and Ethernet cable are supplied with the Minimus+ Accessory Pack.

Analogue and digital sensor cables are supplied with the respective sensors.

No power supply is included.

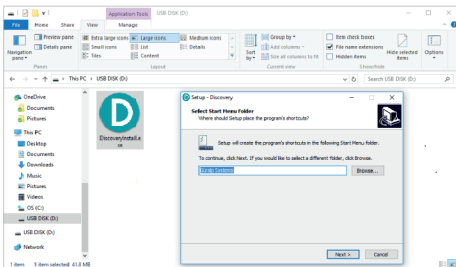
**1** Connect all the hardware using the cables supplied, as shown above.

**2** Switch on the power supply (12–36 V DC). The LED indicator on the Minimus will behave as shown in the table:

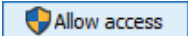
LED flash	Status
WHITE flashing rapidly	booting-up (10-20 s)
quick RED flash followed by 1 s pause	Removable microSD present, no fixed microSD card
2 quick RED flashes followed by 1 s pause	Fixed microSD present, no removable microSD
3 quick RED flashes followed by 1 s pause	microSD cards present Missing or poor GPS
GREEN flash every 4 s	microSD cards and GPS all OK (may take up to 10 min)

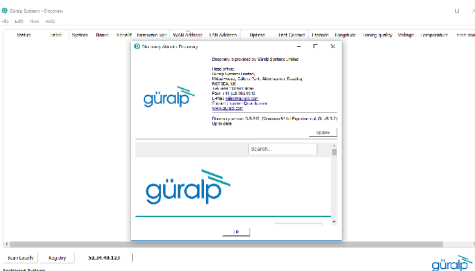
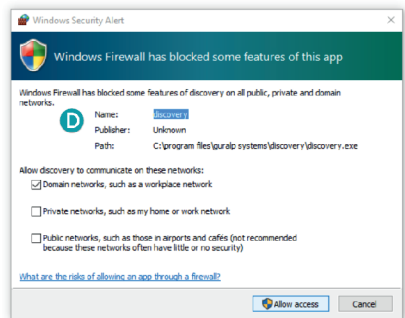
# Installing Güralp Discovery software

Download Güralp Discovery software from:  
<http://www.guralp.com/sw/download-discovery.shtml>



Run the installer that you have downloaded, follow the on-screen instructions to install and then launch Discovery.

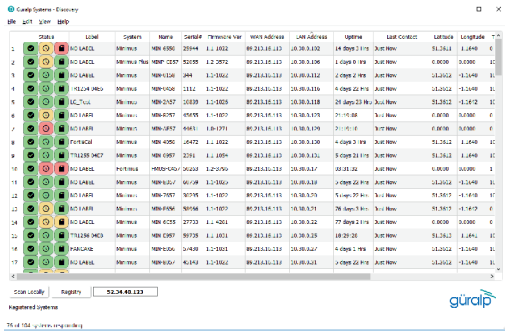
If you see a dialogue from Windows Firewall saying that it has “blocked some features of this app”, select one or more networks from the list provided and then click .



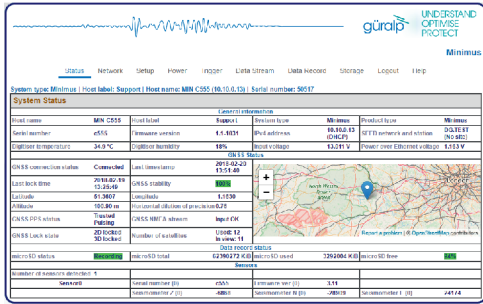
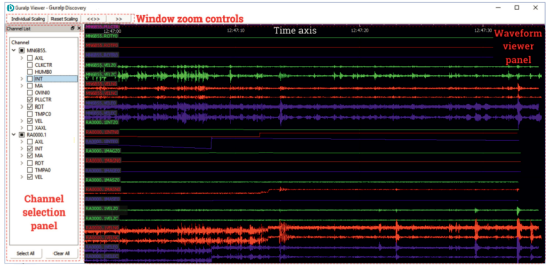
Ensure that your version of Discovery is up to date. To do this, in Discovery, click on the **Help** menu and select **About**. Click on the **Update** button and follow the on-screen instructions.

# View live waveforms and instrument status

Launch Discovery software. The serial number (as shown on the base of the Minimus) should appear in the main window. If the instrument does not appear, check your Ethernet connection and then press the **Scan locally** button (more troubleshooting details in user's manual in section 4.1) Select the instrument and click on the **View** toolbar to select **Live View** then **GDI only**.

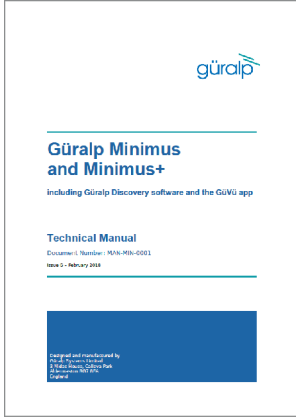


The Live View window will open and start streaming all available data from the connected instruments. Streams can be added or removed from the viewer using the **Channel List** panel on the left-hand side. Amplitude and time zoom/pan can be controlled using the keyboard arrow-keys or the mouse-wheel.



To configure Minimus+ (view instrument state-of-health information, configure station metadata and network configuration, manage data storage and data flow), right-click on the Minimus+ in Discovery's main window and select **View Web Page**.

## Next steps



For detailed information on usage, control & configuration of the Minimus, Güralp highly recommends first reading the Minimus and Minimus+ Manual MAN-MIN-0001:

[www.guralp.com/documents/MAN-MIN-0001](http://www.guralp.com/documents/MAN-MIN-0001)

It may also be important to update firmware on the Minimus+ - refer to Section 5.18 of MAN-MIN-0001 for more details.

## GüVü and GCF Viewer Apps

**GCF Viewer** is an android app which allows you to view GCF files and live data on your mobile device:



<https://play.google.com/store/apps/details?id=com.guralp.gcfviewer>

**GüVü** is an app for monitoring the state of health of Güralp seismic instrumentation. It is available for both Android and IOS:



Android:

<https://play.google.com/store/apps/details?id=com.guralp.whisper>

IOS:

<https://itunes.apple.com/us/app/id1208418113>

For further assistance please contact our technical support team on [support@guralp.com](mailto:support@guralp.com) or call us on +44 118 981 9056.

## Güralp Quality Certificate

It is hereby certified that the product identified below has been fully tested and calibrated in accordance with the Güralp Quality Assurance Program.

The Güralp Quality Management System is accredited to ISO 9001:2015 for the design and manufacture of low noise broadband seismometers, accelerometers, digitisers and networking equipment.

All calibration equipment is certified by an independent test laboratory, accredited to ISO 17025:2005.

**Certificate Serial number**

**Product Serial / Batch Number**

**Final Quality approval**

**Date**



Güralp Systems Limited.  
Registered Office, 3 Midas House,  
Calleva Park, Aldermaston, Reading,  
RG7 8EA  
Registered in England no. 2199239  
VAT Registration no. 491 4657 20



---

# Notes

---

---

---

---

---

---

---

---

---

---

Güralp Systems Limited  
Midas House  
Calleva Park  
Aldermaston  
Reading  
RG7 8EA  
United Kingdom

---

---

T +44 118 981 9056  
F +44 118 981 9943  
E [sales@guralp.com](mailto:sales@guralp.com)

[www.guralp.com](http://www.guralp.com)

---

---

MSH-MIN-0002 Issue D

---